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Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermal Conductive Substrate Core
Inventor(s): Timothy M. Takeuchi
Atty. Docket No.: 42390P13557

100
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FABRICATE A PACKAGE SUBSTRATE HAVING TOP AND BOTTOM SURFACE BUILDUP LAYERS DISPOSED ON A THERMALLY CONDUCTIVE SUBSTRATE CORE

102

EXPOSE A PORTION OF THE SUBSTRATE CORE AT A TOP SURFACE OF THE PACKAGE SUBSTRATE TO ALLOW FOR ATTACHMENT OF A HEAT SPREADER

104

MOUNT AN INTEGRATED CIRCUIT TO THE TOP SURFACE OF THE PACKAGE SUBSTRATE WITH A TOP SURFACE OF THE INTEGRATED CIRCUIT FACING DOWN

106

ATTACH A HEAT SPREADER TO THE PACKAGE SUBSTRATE, THE HEAT SPREADER THERMALLY COUPLED TO THE EXPOSED PORTION OF THE SUBSTRATE CORE AND TO A BACKSIDE SURFACE OF THE INTEGRATED CIRCUIT

108

Figure 1

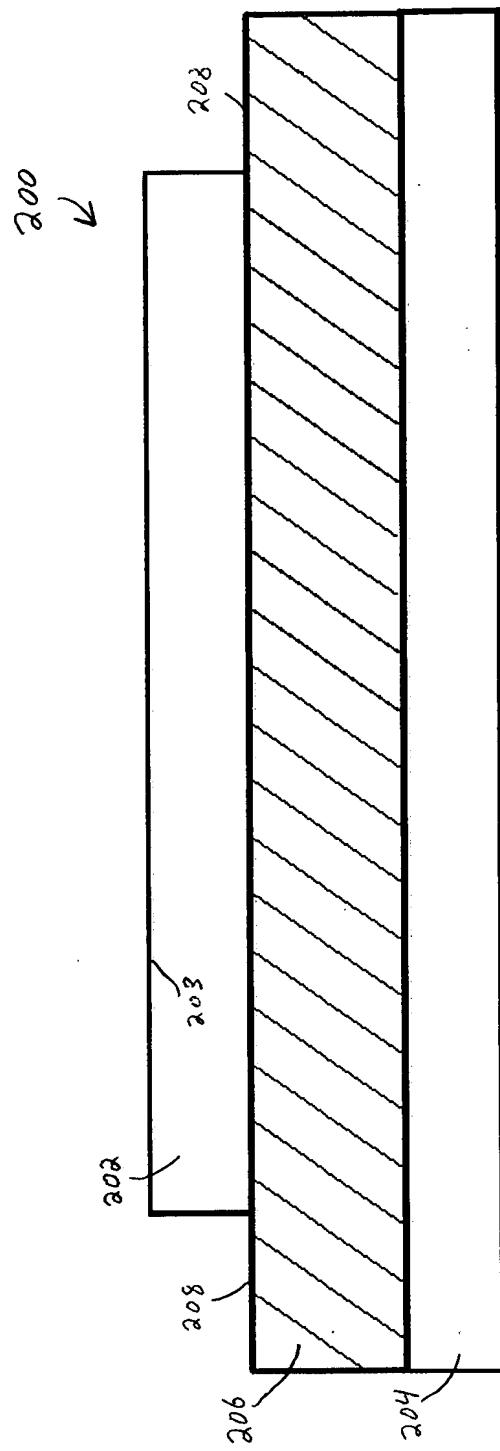


Figure 2

Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
Inventor(s): Timothy M. Takeuchi
Atty. Docket No.: 42390P13557

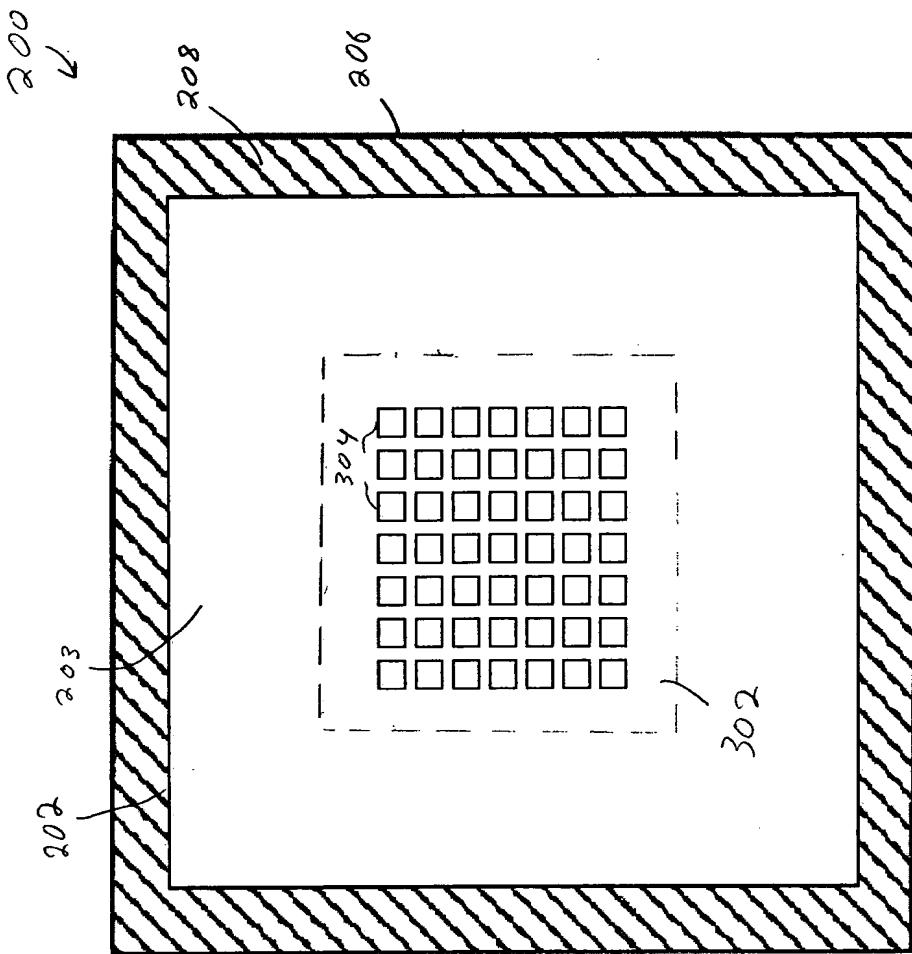


Figure 3

Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
Inventor(s): Timothy M. Takeuchi
Atty. Docket No.: 42390P13557

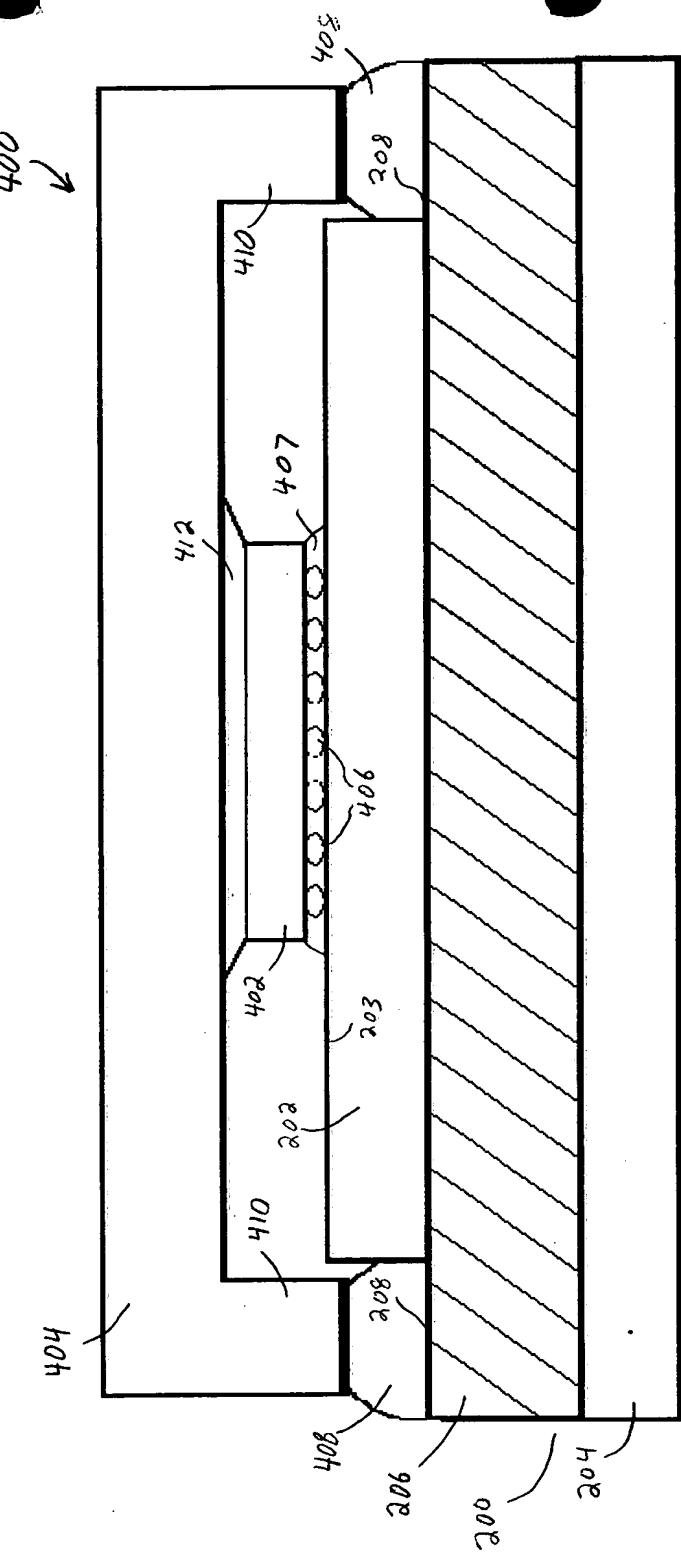


Figure 4

Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
Inventor(s): Timo M. Takeuchi
Atty. Doc#: 42390P13557

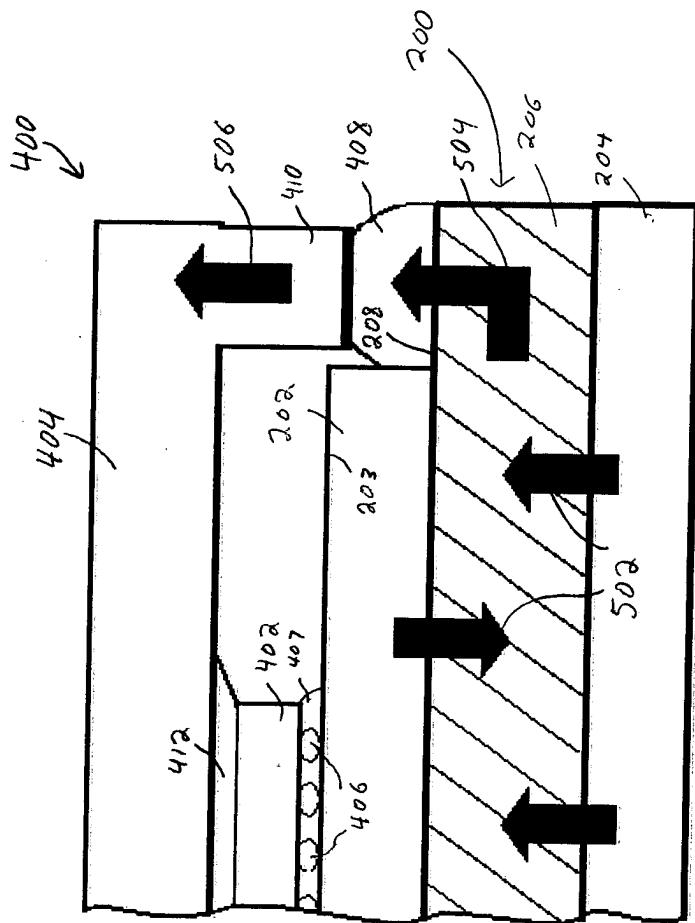


Figure 5

Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
Inventor(s): Timothy M. Takeuchi
Atty. Docket No.: 423901P13557

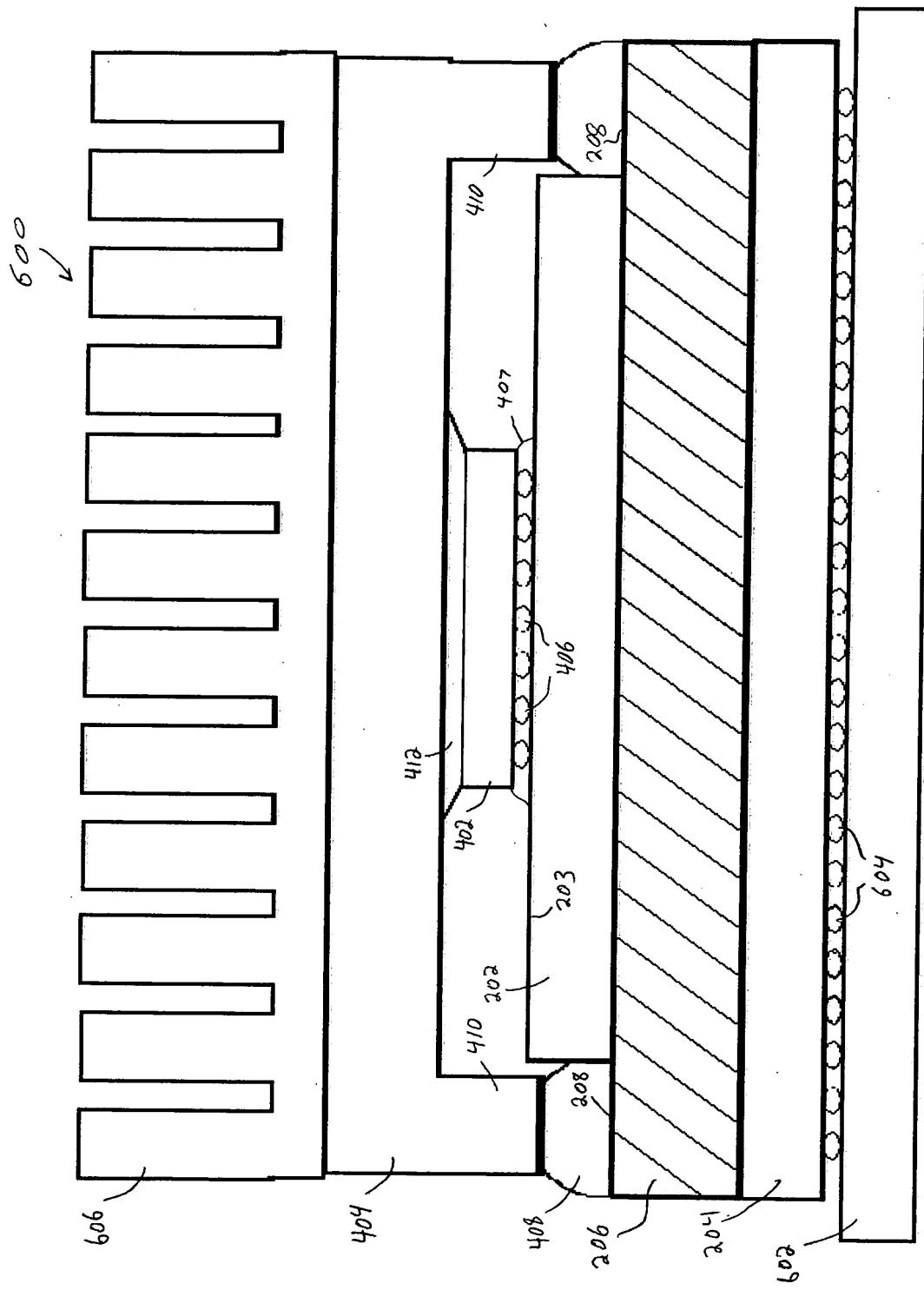
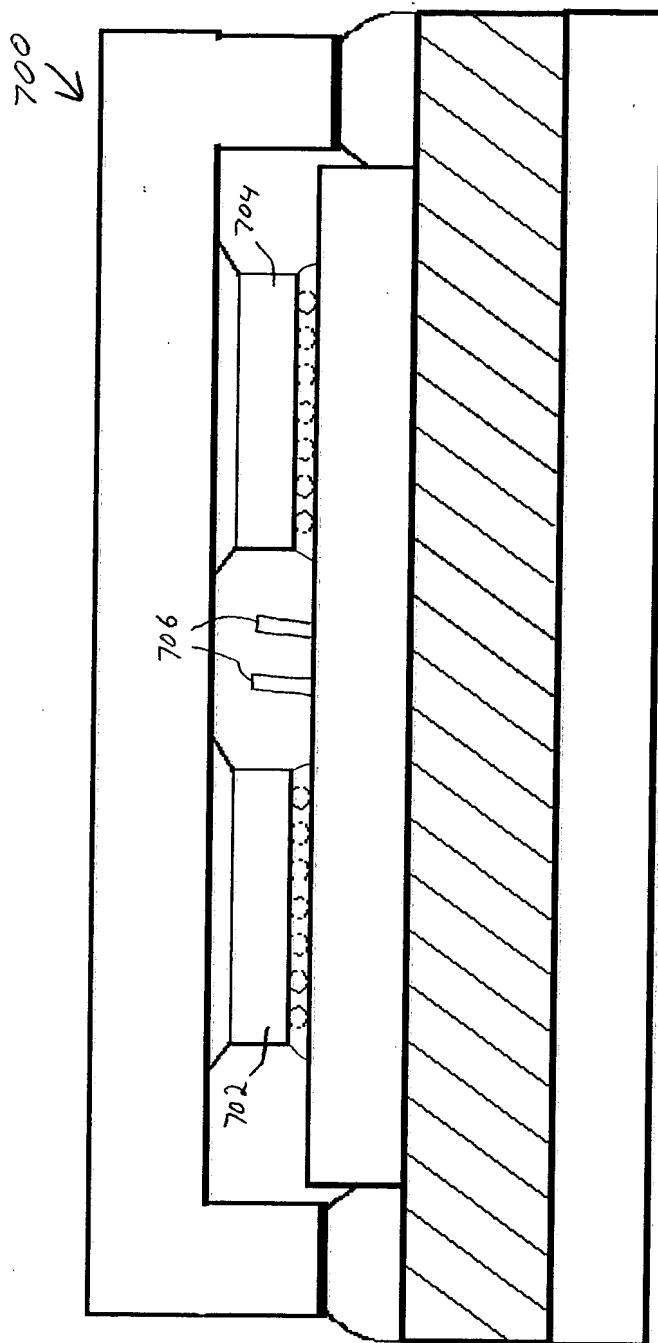


Figure 6

Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
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Figure 7



Title: Semiconductor Package with Integrated Heat Spreader Attached to a Thermally Conductive Substrate Core
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